1. (Amended) A polypeptide isolated from mammals, characterized in that it comprises, at its C-terminal end, a heptapeptide having the following sequence: Cys-Phe,Trp-Lys-Tyr-Cys-Xaa, in which Xaa represents Val or Ile, in that it belongs to the urotensin II family and in that it exhibits at least 45% similarity with the polypeptide sequence SEQ ID NO:1, corresponding to human prepro-urotensin II.

A1 CH

3. (Amended) A purified nucleic acid fragment, characterized in that it is selected from the group consisting of:

a) the fragments comprising at least one sequence encoding a polypeptide as claimed in claim 1,

A2

b) the fragments consisting of a sequence encoding a polypeptide as claimed in claim 1,

c) the oligonucleotides derived from the sequences as defined in b), constituting probes or primers, and

d) the sequences complementary to the above sequences, which may be sense or antisense sequences, with the exception of the EST having the Gen Bank accession number AA535545.

5. (Amended) A recombinant vector, characterized in that it contains a nucleic acid fragment as claimed in claim 3.

6. (Amended) A cell transformed with at least one nucleic acid fragment as claimed in claim 3.

A3

7. (Amended) A reagent for detecting a nucleic acid fragment as claimed in claim 3, characterized in that it comprises between 20 and 50 nucleotides of the sequence SEQ ID NO:4, of the sequence SEQ ID NO:18 or of the sequence SEQ ID NO:27.

9. (Amended) A pharmaceutical composition, characterized in that it comprises at least one polypeptide isolated from mammals, characterized in that it comprises, at its C-terminal end, a heptapeptide having the following sequence: Cys-Phe,Trp-Lys-Tyr-Cys-Xaa, in which Xaa represents Val or Ile, in that it belongs to the urotensin II family and in that it exhibits at least 45%, and preferably at least 70%, similarity with the polypeptide sequence SEQ ID NO:1, corresponding to human prepro-urotensin II, or one nucleic acid sequence as claimed in claim 3 encoding all or part of said polypeptides, combined with at least one pharmaceutically acceptable vehicle.

11. (Amended) A process for detecting the presence or absence of an mRNA encoding a mammalian urotensin II, in particular in individuals with a neurodegenerative pathology or a trauma to the spinal cord, by bringing a biological sample into contact with at least one reagent as claimed in claim 7.

12. (Amended) A process for detecting a mutation in the sequence of the gene or of the mRNA encoding urotensin, characterized in that it comprises extracting said DNA or said mRNA from a biological sample and comparing it with the nucleic acid sequences as claimed in claim 3.

13. (Amended) A diagnostic kit intended for detecting an mRNA encoding a mammalian urotensin II, in a biological sample, said mRNA possibly being mutated, characterized in that it comprises at least one sequence as claimed in claim 3.

14. (Amended) A method for selecting anti-hypertensives comprising determining the activity of an anti-hypertensive against urotensin II as an antagonist.

Please add the following new claims.